

A large industrial machine is shown from a low angle, extending vertically towards the top of the frame. It is used for installing sheet piles. A worker in a blue hard hat and uniform is visible at the bottom left, looking up at the machinery. The background is a clear blue sky.

Sheet piles Trench sheets

Cold formed steel profiles



Ω Omega sheet



L 8

FLP 500

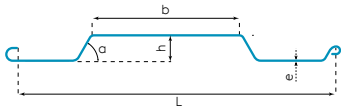
FLP 600

FLP 700

FLP 750

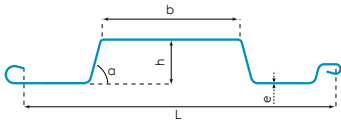
FLP 840

L 8



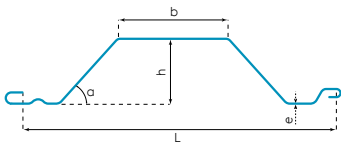
e	h	L	b	a	Weight		Section modulus Elastic W_{pe} (cm ³ /ml)	Moment of inertia I_y (cm ⁴ /ml)	Sectional area A_g (cm ² /ml)	Class according to NF EN 1993-5		
					Single pile (kg/ml)	Wall (kg/m ²)				S 235	S 275	S 355
3,5	38	434	195	60	14,39	33,15	52	98	42,2	4	4	4

FLP 500



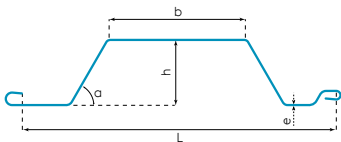
e	h	L	b	a	Weight		Section modulus Elastic W_{pe} (cm ³ /ml)	Moment of inertia I_y (cm ⁴ /ml)	Sectional area A_g (cm ² /ml)	Class according to NF EN 1993-5		
					Single pile (kg/ml)	Wall (kg/m ²)				S 235	S 275	S 355
5	74	494	212	75	28,02	56,72	156	621	72,3	3	3	4
6	75	494	212	75	33,53	67,88	186	747	86,5	2	3	3

FLP 600



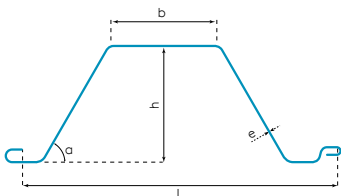
e	h	L	b	a	Weight		Section modulus Elastic W_{pe} (cm ³ /ml)	Moment of inertia I_y (cm ⁴ /ml)	Sectional area A_g (cm ² /ml)	Class according to NF EN 1993-5		
					Single pile (kg/ml)	Wall (kg/m ²)				S 235	S 275	S 355
3	127	600	201	48	19,73	32,90	156	1038	41,9	4	4	4
3,5	128	600	203	48	23,08	38,30	183	1215	48,8	4	4	4
4	128	600	203	48	26,15	43,58	207	1383	55,5	4	4	4
5	129	600	202	48	32,72	54,10	257	1728	68,9	3	3	4
6	130	600	201	48	38,80	64,60	306	2067	82,3	2	2	3

FLP 700



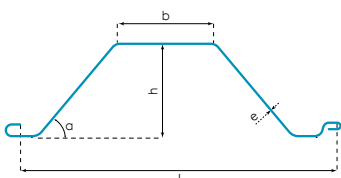
e	h	L	b	a	Weight		Section modulus Elastic W_{pe} (cm ³ /ml)	Moment of inertia I_y (cm ⁴ /ml)	Sectional area A_g (cm ² /ml)	Class according to NF EN 1993-5		
					Single pile (kg/ml)	Wall (kg/m ²)				S 235	S 275	S 355
4	147	700	294	60	31,40	44,85	276	2061	57,1	4	4	4
5	148	700	294	60	39,40	56,20	343	2576	71,6	4	4	4
6	149	700	294	60	47,20	66,90	409	3084	85,2	3	4	4
7	150	700	294	60	54,34	77,60	474	3591	98,9	3	3	4
8	151	700	294	60	61,90	88,45	540	4100	112,7	2	3	3

FLP 750



e	h	L	b	a	Weight		Section modulus Elastic W_{pe} (cm ³ /ml)	Moment of inertia I_y (cm ⁴ /ml)	Sectional area A_g (cm ² /ml)	Class according to NF EN 1993-5		
					Single pile (kg/ml)	Wall (kg/m ²)				S 235	S 275	S 355
6	283	750	241	60	57,46	76,60	788	11375	97,6	3	3	4
7	284	750	241	60	67,00	89,30	912	13263	113,8	2	3	3
8	285	750	241	60	76,60	102,00	1044	15170	129,9	2	2	3

FLP 840



e	h	L	b	a	Weight		Section modulus Elastic W_{pe} (cm ³ /ml)	Moment of inertia I_y (cm ⁴ /ml)	Sectional area A_g (cm ² /ml)	Class according to NF EN 1993-5		
					Single pile (kg/ml)	Wall (kg/m ²)				S 235	S 275	S 355
6	250	840	241	50	57,46	68,40	617	7832	87,1	3	3	4
7	251	840	241	50	67,00	79,76	718	9128	101,6	2	3	3
8	252	840	241	50	76,61	91,20	817	10474	116,2	2	2	3

Properties in compliance with Eurocodes 3 part 5.
Deliveries possible in long lengths (> 14 meters).

Other thickness on demand.

Z sheet piles

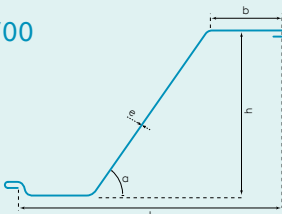


ZP 700

ZP 774

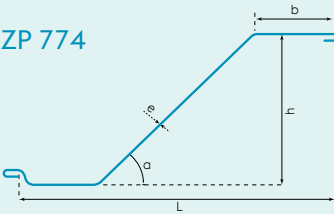
ZP 809

ZP 700



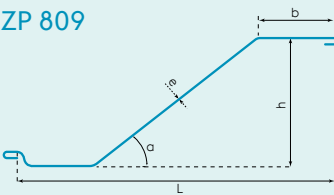
e	h	L	b	a	Weight		Section modulus Elastic W_{el} (cm ³ /ml)	Moment of inertia I_y (cm ⁴ /ml)	Sectional area A_g (cm ² /ml)	Class according to NF EN 1993-5		
					Single pile (kg/ml)	Wall (kg/m ²)				S 235	S 275	S 355
6	440	1400	371	55	51,00	72,85	1289	28351	92,8	3	4	4
7	441	1400	371	55	59,50	85,00	1500	33060	108,3	3	3	3
8	442	1400	371	55	68,00	97,14	1709	37765	123,7	3	3	3

ZP 774



e	h	L	b	a	Weight		Section modulus Elastic W_{el} (cm ³ /ml)	Moment of inertia I_y (cm ⁴ /ml)	Sectional area A_g (cm ² /ml)	Class according to NF EN 1993-5		
					Single pile (kg/ml)	Wall (kg/m ²)				S 235	S 275	S 355
6	375	1548	375	44	51,00	65,90	982	18436	83,9	3	4	4
7	376	1548	375	44	59,50	76,90	1142	21497	98,0	3	3	3
8	377	1548	375	44	68,00	87,90	1300	24555	112,0	3	3	3

ZP 809

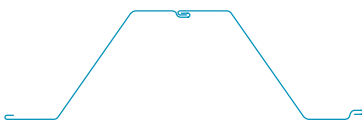


e	h	L	b	a	Weight		Section modulus Elastic W_{el} (cm ³ /ml)	Moment of inertia I_y (cm ⁴ /ml)	Sectional area A_g (cm ² /ml)	Class according to NF EN 1993-5		
					Single pile (kg/ml)	Wall (kg/m ²)				S 235	S 275	S 355
6	335	1618	378	38	51,00	63,00	830	13905	80,3	3	4	4
7	336	1618	378	38	59,50	73,50	965	16213	93,6	3	3	4
8	337	1618	378	38	68,00	84,00	1100	18518	107,0	3	3	3

Properties in compliance with Eurocodes 3 part 5.
Deliveries possible in long lengths (> 14 meters).
Other thickness on demand.

Quality and performance

Our cold rolled sheet piles have a wide spectrum of mechanical value in compliance with Eurocodes 3 Parts 5 and with the EN 10249. Our sheet piles present an optimal ratio volume/mechanical value because of a reduced "h". The Z sections present the best rate weight/mechanical value on the market.



Welding

The voestalpine Profilafröid Z sheet piles can be delivered, on request, in pairs welded with 150 mm long weld seam, regularly spaced out.

Pile length (L) en m	Weld number
L ≤ 3,0	2
3,0 < L ≤ 8,0	3
8,0 < L ≤ 12,0	4
12,0 < L	5

Locks

Each sheet pile has locks in compliance with EN 10249.2. Each section could be adapted to your foundation geometries. Our locks are resistant to opening and unlocking and present a large deflection angle. Considering equivalent section, our Omega sheet piles section has higher mechanical value than « U » warm laminated sheet piles because of a better forces transmission into the locks.



Trench sheet



CR 430

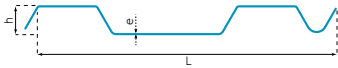
KD 400

KD 500

KD 600

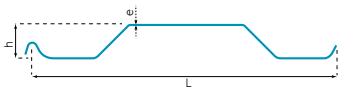
KD 750

CR 430 à 450



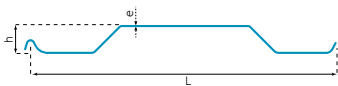
Réf.	e (mm)	h (mm)	L	Weight		Section modulus (cm ³ /ml)	Moment of inertia (cm ⁴ /ml)
				Single pile (kg/ml)	Wall (kg/m ²)		
CR 430	3	34	330	9,72	29,45	40	68
CR 435	3,5	35	330	11,21	33,96	44	79
CR 440	4	35	330	12,96	39,29	52	91
CR 450	5	36	330	16,09	48,76	63	114

KD 400



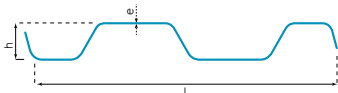
Réf.	e (mm)	h (mm)	L	Weight		Section modulus (cm ³ /ml)	Moment of inertia (cm ⁴ /ml)
				Single pile (kg/ml)	Wall (kg/m ²)		
KD 400	5	49	400	18,52	46,30	84	208
KD 400	6	50	400	22,23	55,57	99	250

KD 500



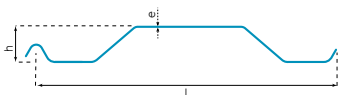
Réf.	e (mm)	h (mm)	L	Weight		Section modulus (cm ³ /ml)	Moment of inertia (cm ⁴ /ml)
				Single pile (kg/ml)	Wall (kg/m ²)		
KD 500	5	49	500	22,45	44,90	86	215
KD 500	6	50	500	26,94	53,88	101	258

KD 600

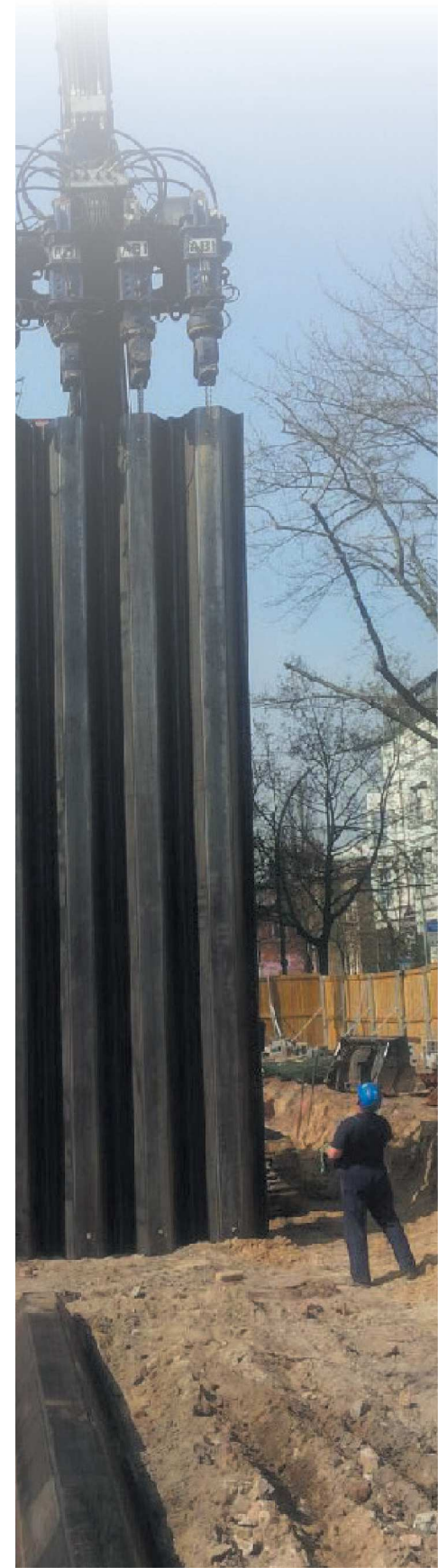


Réf.	e (mm)	h (mm)	L	Weight		Section modulus (cm ³ /ml)	Moment of inertia (cm ⁴ /ml)
				Single pile (kg/ml)	Wall (kg/m ²)		
KD 600	6	78	600	37,50	62,00	184	718
KD 600	8	80	600	50,00	83,00	237	947
KD 600	9	61	600	55,53	92,55	263	1066


KD 750



Réf.	e (mm)	h (mm)	L	Weight		Section modulus (cm ³ /ml)	Moment of inertia (cm ⁴ /ml)
				Single pile (kg/ml)	Wall (kg/m ²)		
KD 750	5	91	742	33,79	45,54	163	745
KD 750	6	92	742	40,90	54,66	194	893
KD 750	7	93	742	47,03	63,40	224	1042
KD 750	8	94	742	53,56	72,18	254	1197
KD 750	9	95	742	60,26	81,21	283	1346



Properties in compliance with Eurocodes 3 part 5.
Deliveries possible in long lengths (> 14 meters).
Other thickness on demand.



voestalpine Profilafröid design and manufacture, from first quality steel, profiles with various shape and for multiple use. Our profiles are rolled in France in our factory located near Paris, F-60 Bailleul-sur-Therain.

Surface Treatment

Our sections can be delivered with pre applied coatings including standard primers, multi-pack paint systems and hot dipped galvanisation according to EN ISO 1461. Applying a surface protection system not only reduces corrosion but also improves the appearance of your product which can be an interesting compromise between cost and life expectancy.

Steel qualities

Grade	Tensile strenght	Yield strenght	Elongation
S 235 JR	360/510 MPa	S 235 MPa	26 %
S 275 JR	410/460 MPa	S 275 MPa	23 %
S 355 JO	470/630 MPa	S 355 MPa	22 %
S 500 MC	550/700 MPa	S 500 MPa	14 %

Other grades on request

Slings hole

Our sections are delivered with a \varnothing 40 mm slings hole. Other drilling can be arranged by prior agreement.

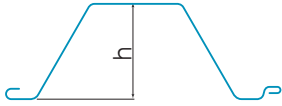
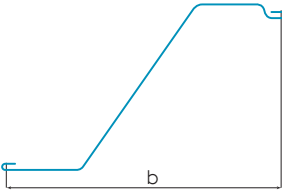
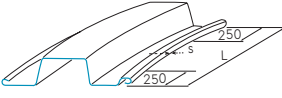
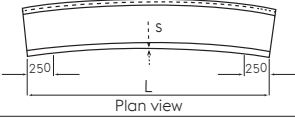
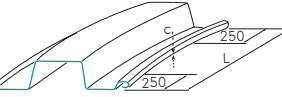
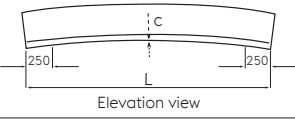
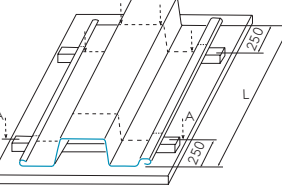
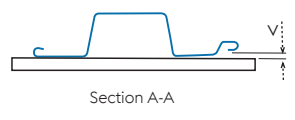
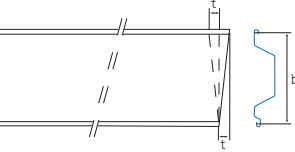


Accessories and options on demand

- > Connector profiles
- > Angle or U shape sections for sheet pile covering
- > Marking on profile

Sheet piles tolerances

according to EN 10249

		Nominal Size	Tolerances
Height (h)		$< h \leq 200$ mm $200 < h \leq 300$ mm $300 < h \leq 400$ mm $400 < h$	± 4 mm ± 6 mm ± 8 mm ± 10 mm
Width (b)		Single sheet piles Sheet piles threaded in pairs	$\pm 2 \% b$ $\pm 3 \% b$
Thickness e		$e = 3,00$ mm $3,00 < e \leq 4,00$ mm $4,00 < e \leq 5,00$ mm $5,00 < e \leq 6,00$ mm $6,00 < e \leq 8,00$ mm $8,00 < e \leq 10,00$ mm	$\pm 0,26$ mm $\pm 0,27$ mm $\pm 0,29$ mm $\pm 0,31$ mm $\pm 0,35$ mm $\pm 0,40$ mm
Bending Bow-Height (S)			$0,25 \% L$
Curving Bow-Height (C)			$0,25 \% L$
Twisting Dimension (V)			$\pm 2 \% L$ or 100 mm max.
Profile Length L			± 50 mm
Squareness of ends (t)			$\pm 2 \% b$
Mass			$\pm 7 \%$
Difference between the theoretical mass and the total actual mass delivered (*)			

*Reduced tolerance on demand.

Certifications


Système

voestalpine Profilafroid est certifiée


ORGANISATION AVEC
SYSTÈME QUALITÉ CERTIFIÉ
PAR DNV
ISO 9001

Produits

Les produits sont certifiés CE EN1090-1



1166
18
1166-CPR-0245



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voestalpine

ONE STEP AHEAD.